PLATES

TO

ALEXANDER DE HUMBOLDT'S

POLITICAL ESSAY

ON

THE KINGDOM

OF

NEW SPAIN.

LONDON:

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T. Davison, Lombard street,
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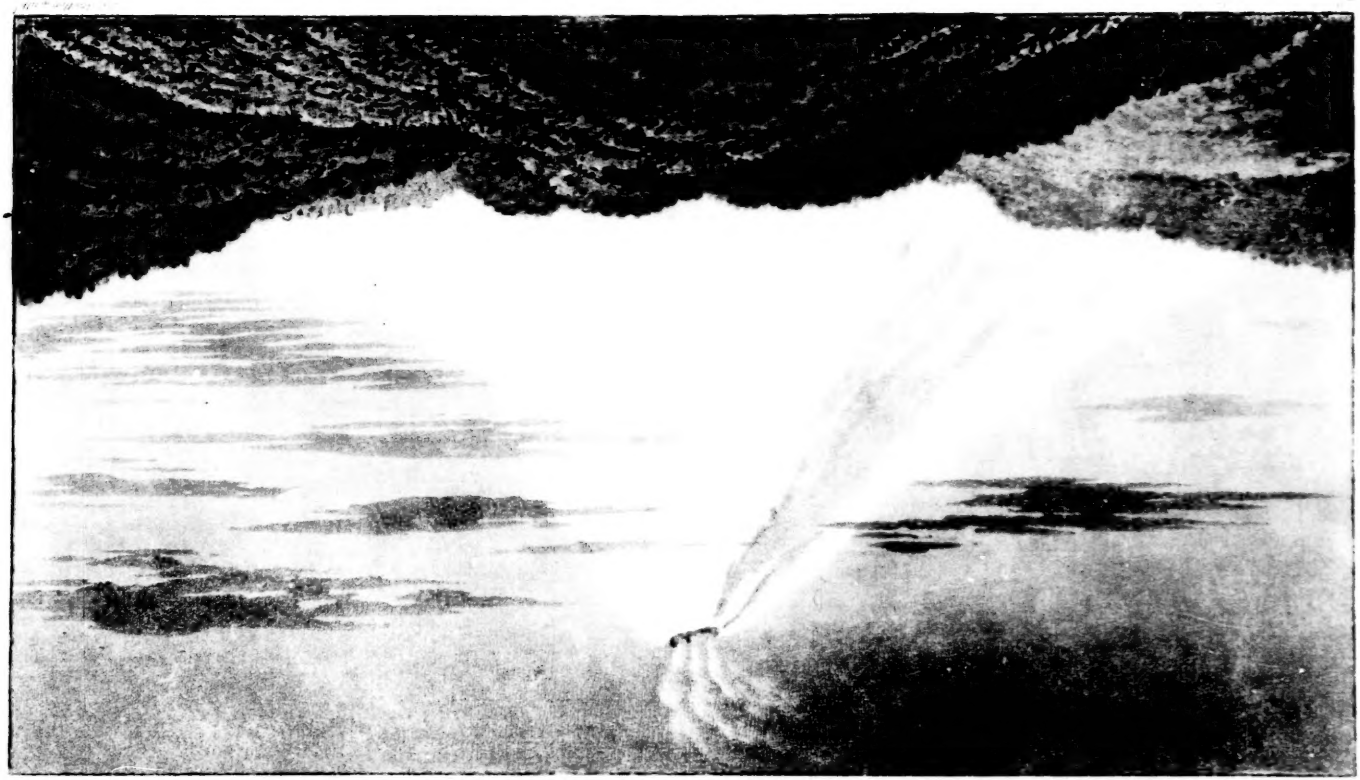
CONTENTS.

1. *Peak of Orizaba.*
2. *Volcanos of La Puebla.*
3. *Plan of the Port of Acapulco.*
4. *Map of the Valley of Mexico.*
5. *Plan of the Port of Veracruz.*
6. *Section of the Western Declivity of the Table-land of New Spain.*
7. *Ditto, Eastern Declivity, ditto.*
8. *Ditto, Central Table, ditto.*
9. *Map of New Spain.*

23958



Published by Longman Hurst Rees & Orme, 1808.

Latitude of Acapulco	16°. 50'. 29". N.
Longitude West from Paris in time	6h. 48'. 24
Mean Temperature	27°. 4'. Centigrade
Inclination of the Magnetic Needle in March 1803 new division	43°. 2'. 0
Intensity of the Magnetical force (expressed by 240 oscillations when under the Magnetic Equator) 211 in 10' of time.	

Humboldt.

A.	Arena / fine Sand
P.	Piedra / Rocky bottom
AL.	Arena y Lama / Sand and Mud
Ag.	Arena gruessa / Gravel
L.	Lama / Mud
C².	Conchuela / Shells
AF.	Arena y Fango / Sand and Slime
AG².	Arena y Guijo / Sand and Gravel

The Figures denote Fathoms.

PLAN
of the
PORT
of
ACAPULCO.

Scale of 2 Maritime Miles or 1900 Toises

¼ 1 ½ 2

The Rio
the Rio
way to
Eastern
of the
Ex

MAP

Of the Valley of Mexico

And Neighbouring Mountains

ed on the Spot in 1804. by Don Louis Martin.

d. New modelled and corrected in 1807

m the Trigonometrical operations of

Don Joaquin Velasquez.

he Astronomical observations, and Barometrical

measurements of A. de Humboldt.

By JABBO OLTMANNS.

al of Huehuetoca conducts the waters of the Rio de Guautitlan by the Rio de Tula
zuma and the Rio de Panuco to the Atlantic Ocean. – The Canals of Zumpango
d San Christobal (B.F.C) were added in 1796 & 1798. – The small Canal of Vertiderve
rvas to throw the Desague dry. – The Canals (A.B) were projected to remove the
o which the City of Mexico is still exposed of inundations from the South and East.

Humboldt.

The Rio de Lerma join
the Rio de Santiago i
way to the South Sea

Eastern Extremity of the Plain of Toluca

n Extremity of

Part of the Territory of Tlascala.

S. Matias de Tlalnacaleca
S. Christobal
Cerro de S. Martin
S. Baltasar
S. Martin
Cuesta de Masoma
Salvador el Verde
S. Ana
Cerro Mendozino
S. Luis
S. Rafael
S. Miguel del Milagro
S. Miguel Soxotla
S. Pedro Tlattemango
S. Franc. Ocotlan (Port)
S. Antonio
Huyscingo
Quatlacingo

Explanation

CAPITAL or
Town.
Village.
Astron. observ.
Result of a Tr
(The numb
indicate the
above the le

the Plain of Cholula

S. Buenaventura
S. Lago Salzinilla
S. Gregorio
S. Antonio Sedesotla
Cholula (Cholollan)
S. Nicolas de los Ranchos
Bridge of Mexico
PUEBLA de los Angeles (1268 t)

from 1400 to 1600 toises above the level of the Sea.

Amajuca

The small Rivers which rise in the Southern declivity of the Cordillera of Cuchilaque and Popocatepetl join the Rio Papagayo which falls into the South Sea.

40' 30' 20'

40'
30'
20'
10'
101°
Tula
Zumpango
Tzompango
Tezcuco
Lake of Tezcuco
MEXICO
(1168 t.) Pueblo
Covered with Water in May
Rio de Lerma (Tolotzingo)
The Rio de Lerma joins the Rio de Santiago in its way to the South Sea.
Eastern Extremity of the Plain of Toluca.
TOLUCA
(Toluca) (1379 t.)
Nevado de Toluca (2370 t.)
Chalco
Iztapalapa
Los Reyes
Tlapizahua
Tenango
Iztapec
Explanation of Signs.
CAPITAL or great CITY.
Town.
Village.
Astron. observ. of Long. & Lat.
of Lat.
of Long.
Result of a Trigonom. Oper.ⁿ (The number of toises indicates the elevation above the level of the Sea.)

MAP

Of the Valley of Mexico

And Neighbouring Mountains

Sketched on the Spot in 1803 by Don Louis Martin, and Newly modelled and corrected in 1807 from the Trigonometrical operations of Don Joaquin Velasquez, and the Astronomical observations, and Barometrical measurements of M. de Humboldt.

By JABBO OLTMANNS.

The Canal of Huehuetoca conducts the waters of the Rio de Guautitlan by the Rio de Tula or Montezuma and the Rio de Panuco to the Atlantic Ocean. – The Canals of Zumpango (D.F) and San Christobal (B.F.C) were added in 1796 & 1798. – The small Canal of Vertidero (D.E) serves to throw the Desague dry. – The Canals (A.B) were projected to remove the danger to which the City of Mexico is still exposed of inundations from the South and East.

Humboldt.

Part of the Territory of Tlascala.

Western Extremity of the Plain of Cholula from 1400 to 1200 toises above the level of the Sea.

The small Rivers which rise in the Southern declivity of the Cordillera of Cuchilaguo and Popocatepetl join the Rio Papagayo which falls into the South Sea.

Bridge of Mexico

PUEBLA de los Angelos (1176 t)

Cholula (Cholollan)

S. Matias de Tlalancaleca

S. Christobal

S. Martin

S. Baltasar

S. Rafael

S. Martin

S. Ana

Cuesta de Masoma

S. Salvador el Verde

S. Felipe

Cerro Mendozino

S. Luis

S. Rafael

S. Miguel del Milagro

S. Miguel Soxtla

S. Pedro Tlaltenango

S. Franc. Ocotlan (1201 t)

S. Antonico

Huejocingo

Quatlacingo

S. Buenaventura

S. Iago Saltsintla

S. Gregorio

S. Antonio Sedesotla

S. Nicolas de los Ranchos

Zampoala

Tlascala

Guatepec

S. Martinico

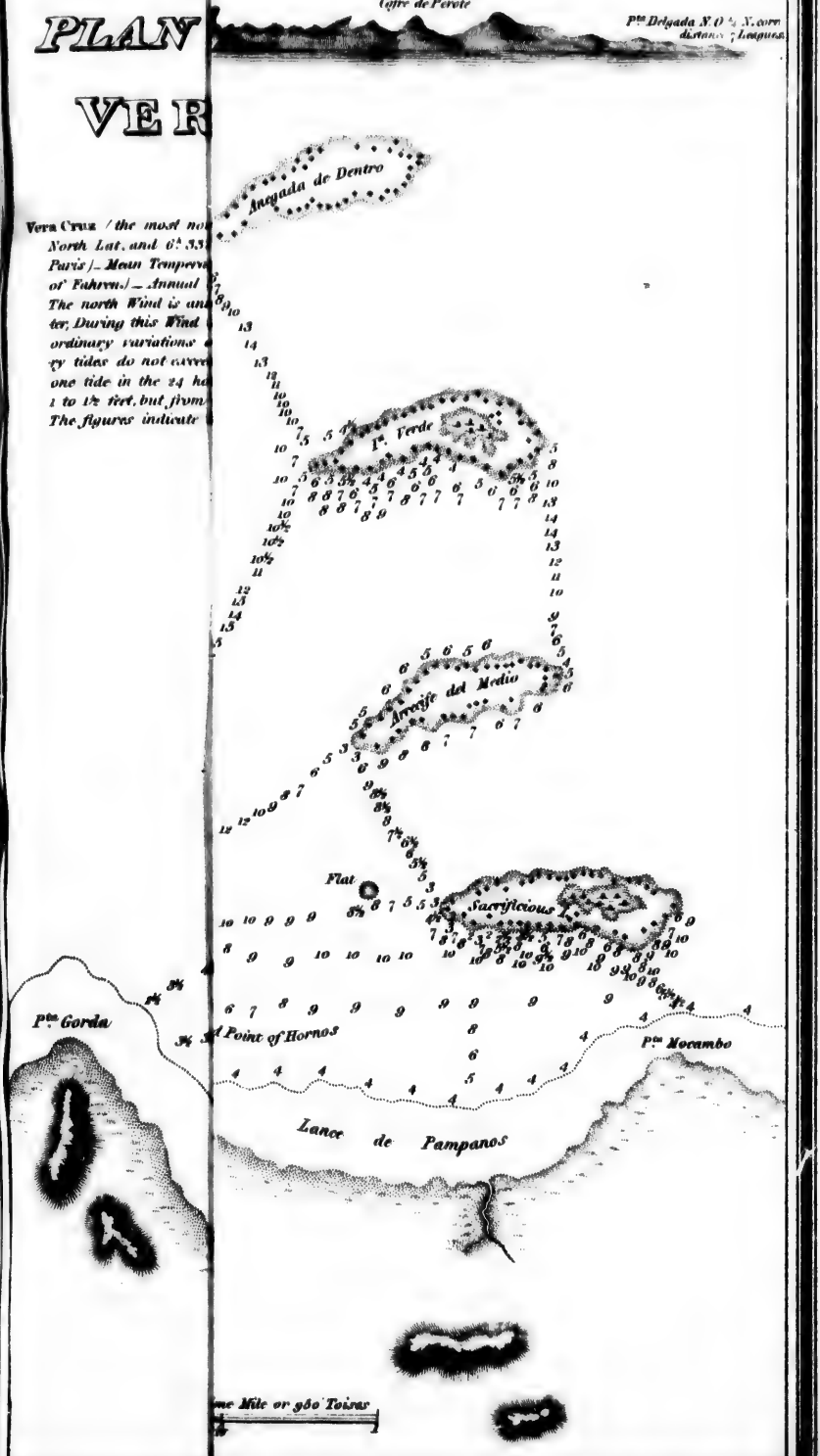
El Molinito

Tlalmanalco

Amajuca

PLAN

VE R

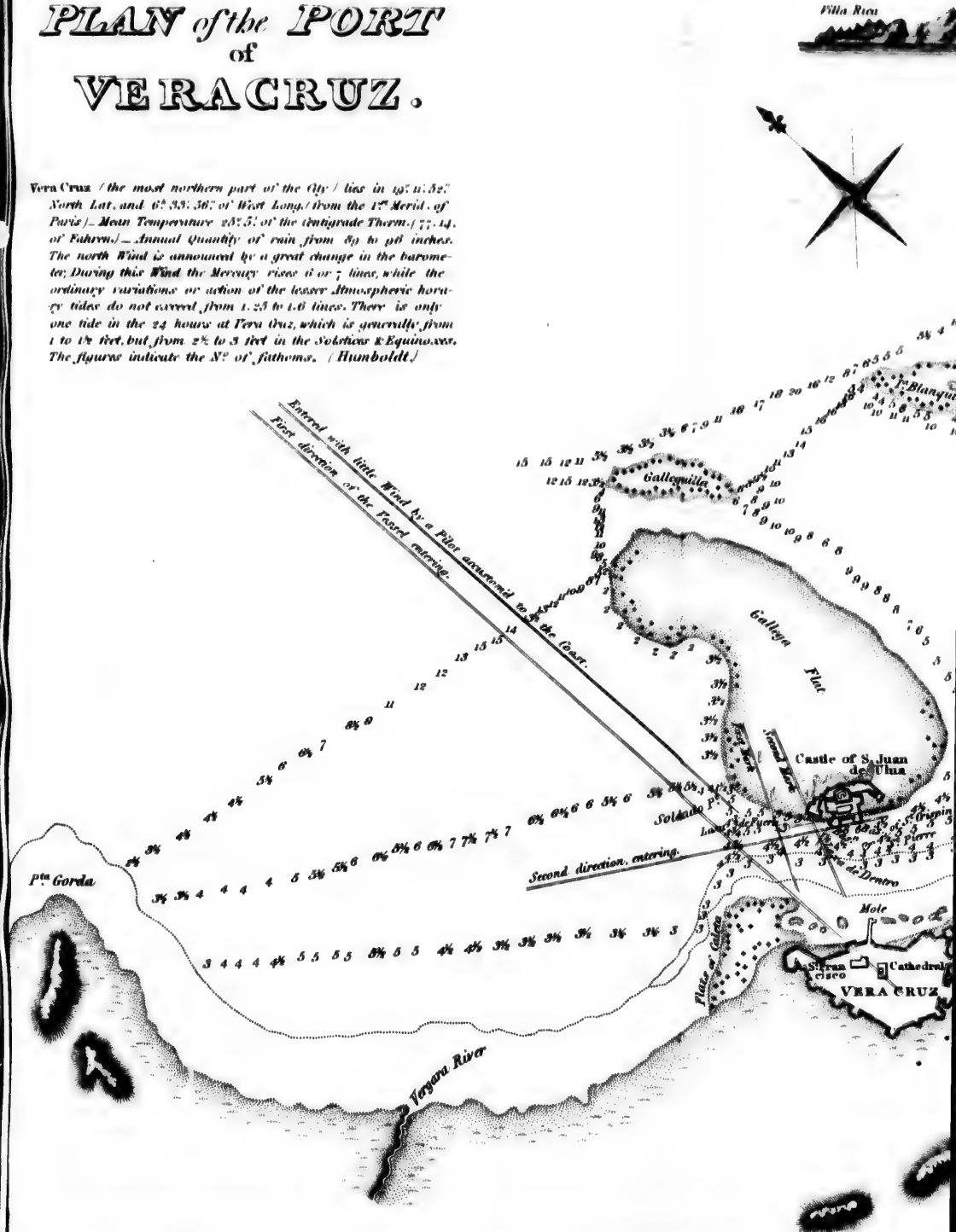


Vera Cruz / the most no
North Lat. and 6h 33
Paris / Mean Temperu
of Fahren. / Annual
The north Wind is an
ter, During this Wind
ordinary variations
ry tides do not exce
one tide in the 24 ho
1 to 1½ feet, but from
The figures indicate

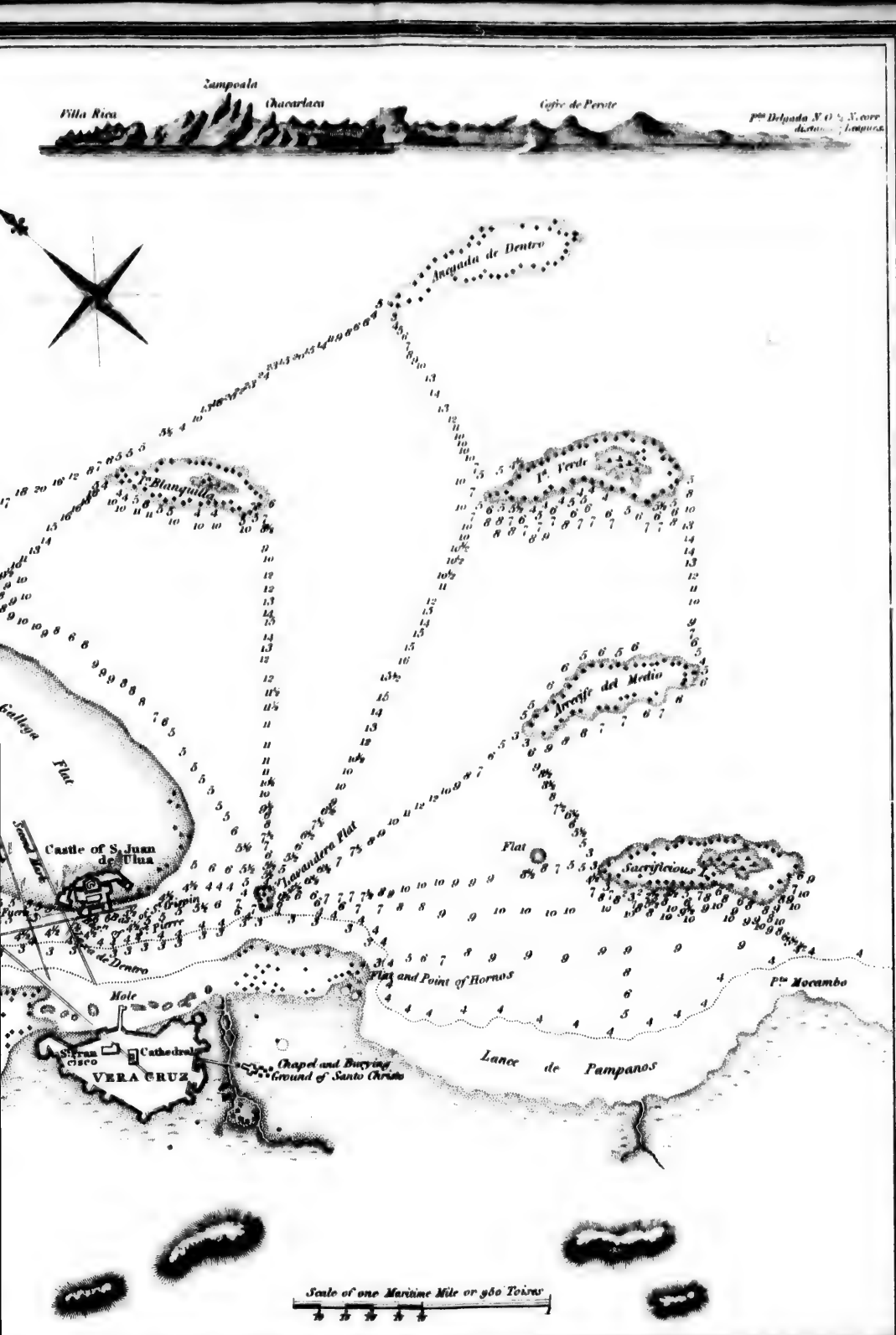
Lowry Sc.

PLAN of the PORT of VERACRUZ.

Vera Cruz / the most northern part of the City / lies in 19° 11′ 52″ North Lat. and 6° 33′ 36″ of West Long. / from the 1st Merid. of Paris / — Mean Temperature 25°.5 of the Centigrade Therm. / 77°.14. of Fahrenh. / — Annual Quantity of rain from 89 to 96 inches. The north Wind is announced by a great change in the barometer; During this Wind the Mercury rises 6 or 7 lines, while the ordinary variations or action of the lesser Atmospheric horary tides do not exceed from 1.25 to 1.6 lines. There is only one tide in the 24 hours at Vera Cruz, which is generally from 1 to 1½ feet, but from 2½ to 3 feet in the Solstices & Equinoxes. The figures indicate the Nº of fathoms. / Humboldt /



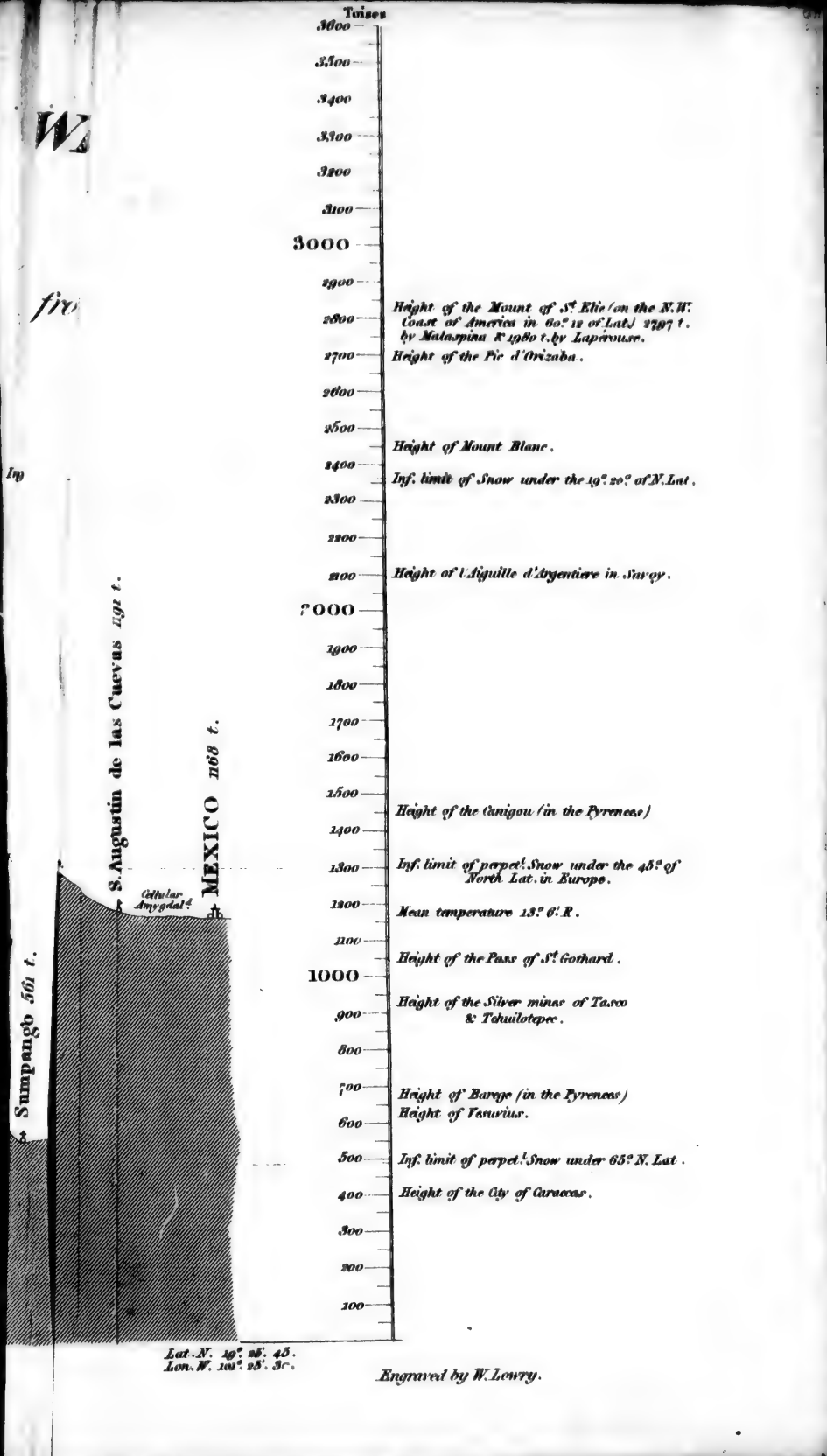
Published by Longman & Cº Oct. 15th



Lowry Sc.

ed by Longman & Co. Oct. 15th. 1820.

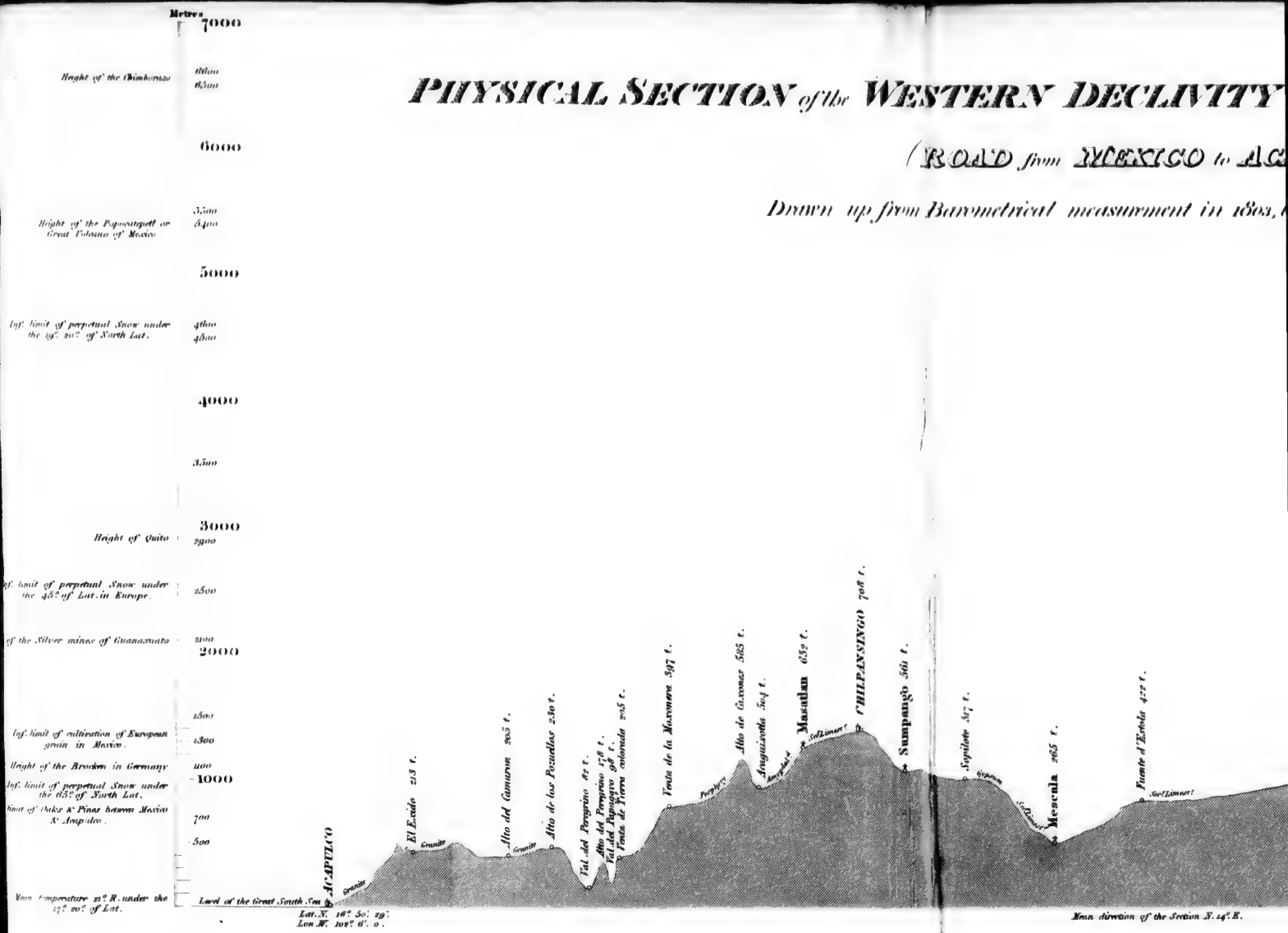
Sumpango 561 t.


Toises
3600
3500
3400
3300
3200
3100
3000
2900
2800
2700
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
Height of the Mount of St. Elie (on the N.W. Coast of America in 60° 12 of Lat.) 2797 t. by Malaspina & 1960 t. by Lapérouse.
Height of the Pic d'Orizaba.
Height of Mount Blanc.
Inf. limit of Snow under the 19°. 20°. of N. Lat.
Height of l'Aiguille d'Argentiere in Savoy.
Height of the Canigou (in the Pyrenees)
Inf. limit of perpet.l Snow under the 45° of North Lat. in Europe.
Mean temperature 13°. 6'. R.
Height of the Pass of St. Gothard.
Height of the Silver mines of Tasco & Tehuilotepec.
Height of Barege (in the Pyrenees)
Height of Vesuvius.
Inf. limit of perpet.l Snow under 65° N. Lat.
Height of the City of Caracas.
Sumpango 561 t.
S. Augustin de las Cuevas 491 t.
Cellular Amygdal.d
MEXICO 968 t.
Lat. N. 19°. 25'. 45.
Lon. W. 103°. 28'. 30.
Engraved by W. Lowry.

PHYSICAL SECTION of the WESTERN DECLIVITY

(ROAD from MEXICO to AC

Drawn up from Barometrical measurment in 1803,

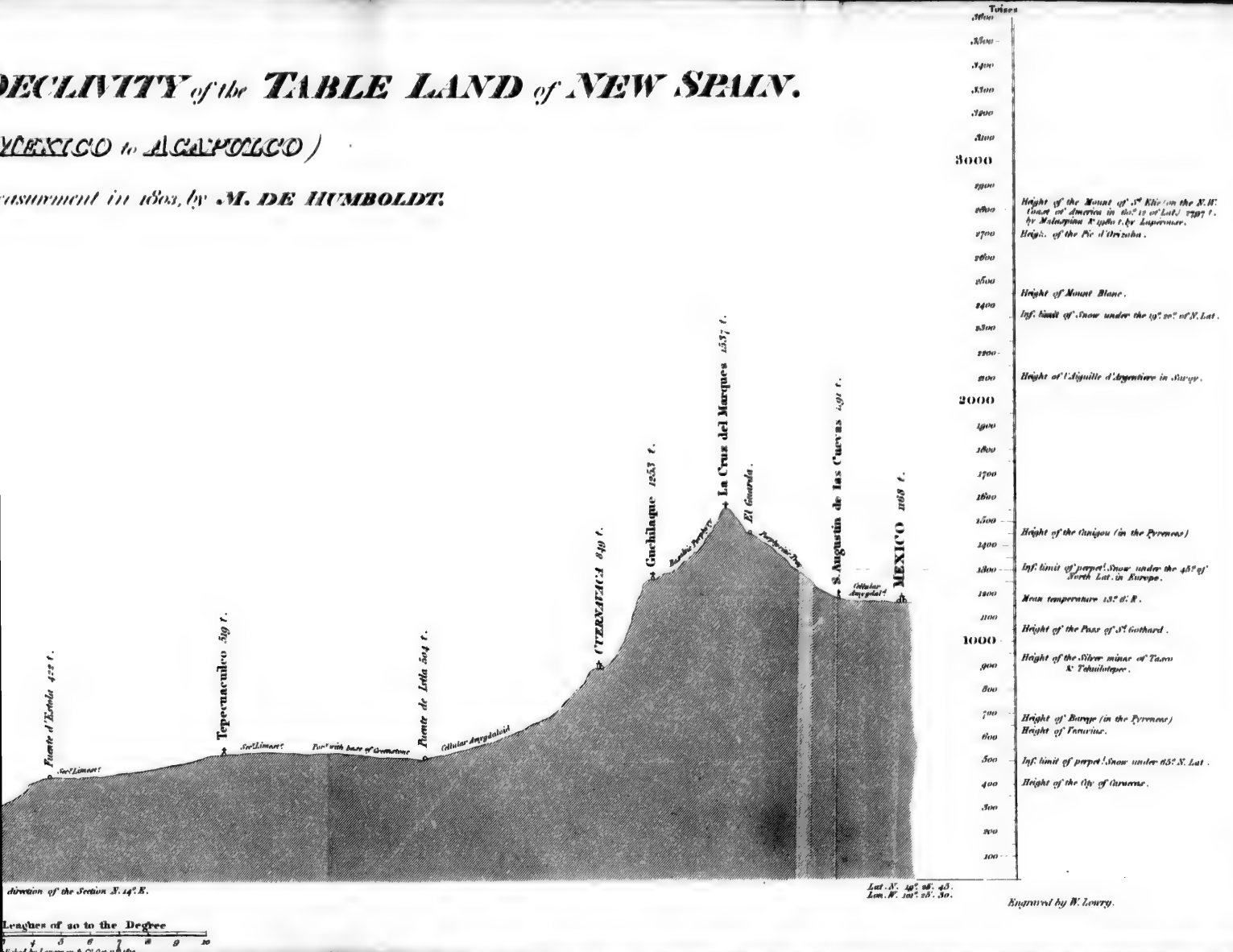


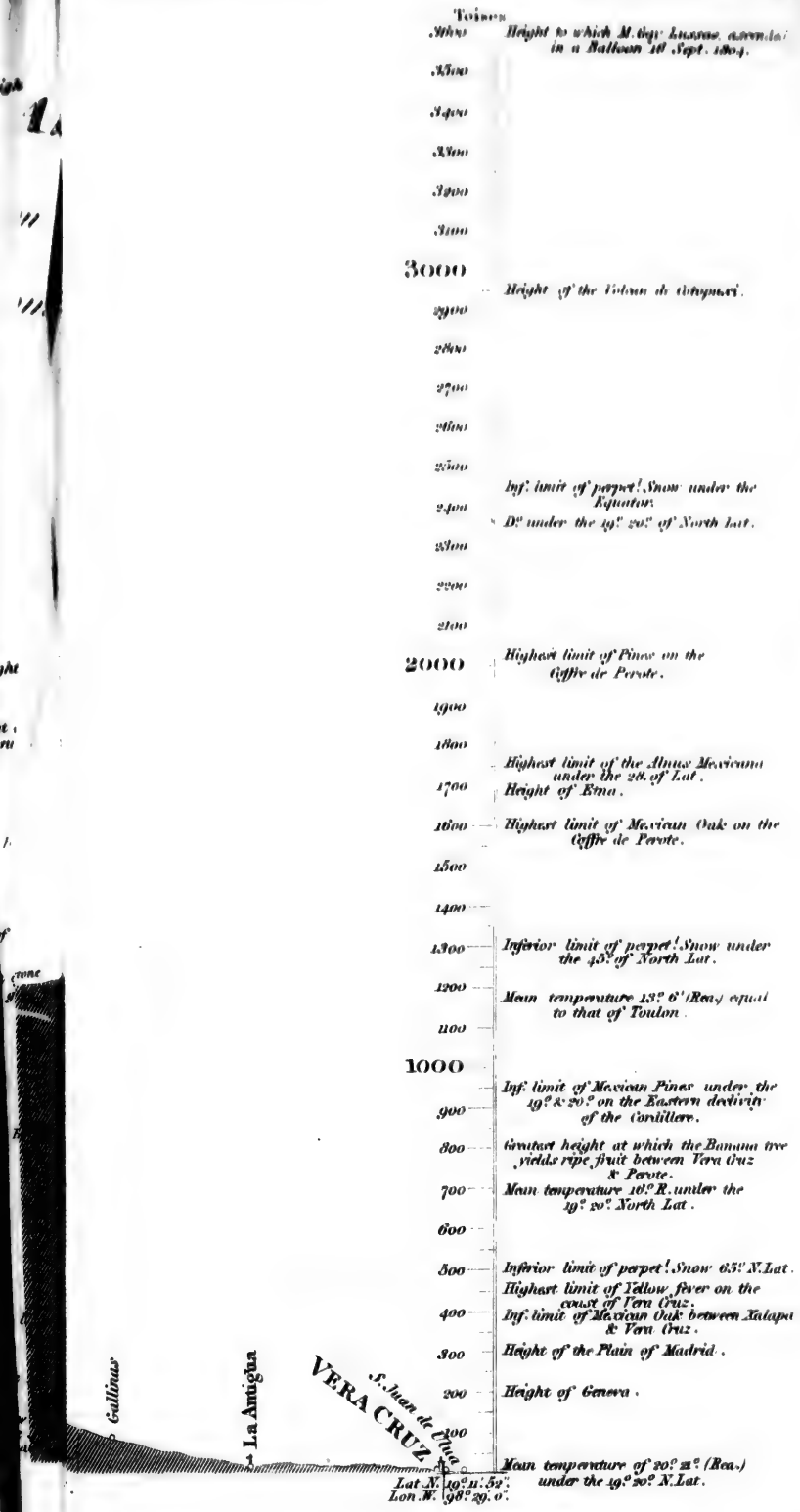
Published by Longman & Co. Oct. 1. 1810.

DECLIVITY of the TABLE LAND of NEW SPAIN.

(MEXICO to ACAPULCO)

Measurment in 1803, by M. DE HUMBOLDT.


Toises
3000
2000
1000
Fuente d'Extola 422 t.
Tepeyacuilco 319 t.
Puente de Lula 304 t.
CUERNAVACA 830 t.
Gachilaque 1253 t.
La Cruz del Marques 1357 t.
El Guarda.
S.t Augustin de las Cuevas 491 t.
MEXICO 1168 t.
Secd Limest
Porf. with base of Greenstone
Cellular Amygdaloid
Basaltic Porphyry
Porphyritic Peg
Cellular Amygdaloid
Height of the Pic de Orizaba.
Height of Mount Blanc.
Inf. limit of Snow under the 19.th deg.e of N. Lat.
Height of l'Aiguille d'Argentiere in Savoy.
Height of the Canigou (in the Pyrenees)
Inf. limit of perpet.l Snow under the 45.th deg.e of North Lat. in Europe.
Mean temperature 15.° of R.
Height of the Pass of St. Gothard.
Height of the Silver mine of Tasco
N. Tehuilotepec.
Height of Barege (in the Pyrenees)
Height of Taurinia.
Inf. limit of perpet.l Snow under 65.° N. Lat.
Height of the Ox of Taurus.
direction of the Section N. 14.° E.
Lat.e N. 19.° 26'. 45".
Lon.e W. 101.° 25'. 30".
Engraved by W. Lowry.
Leagues of 20 to the Degree
0 1 2 3 4 5 6 7 8 9 10
Pub.shed by Longman & Co.e Oct.r 1.st 1810.

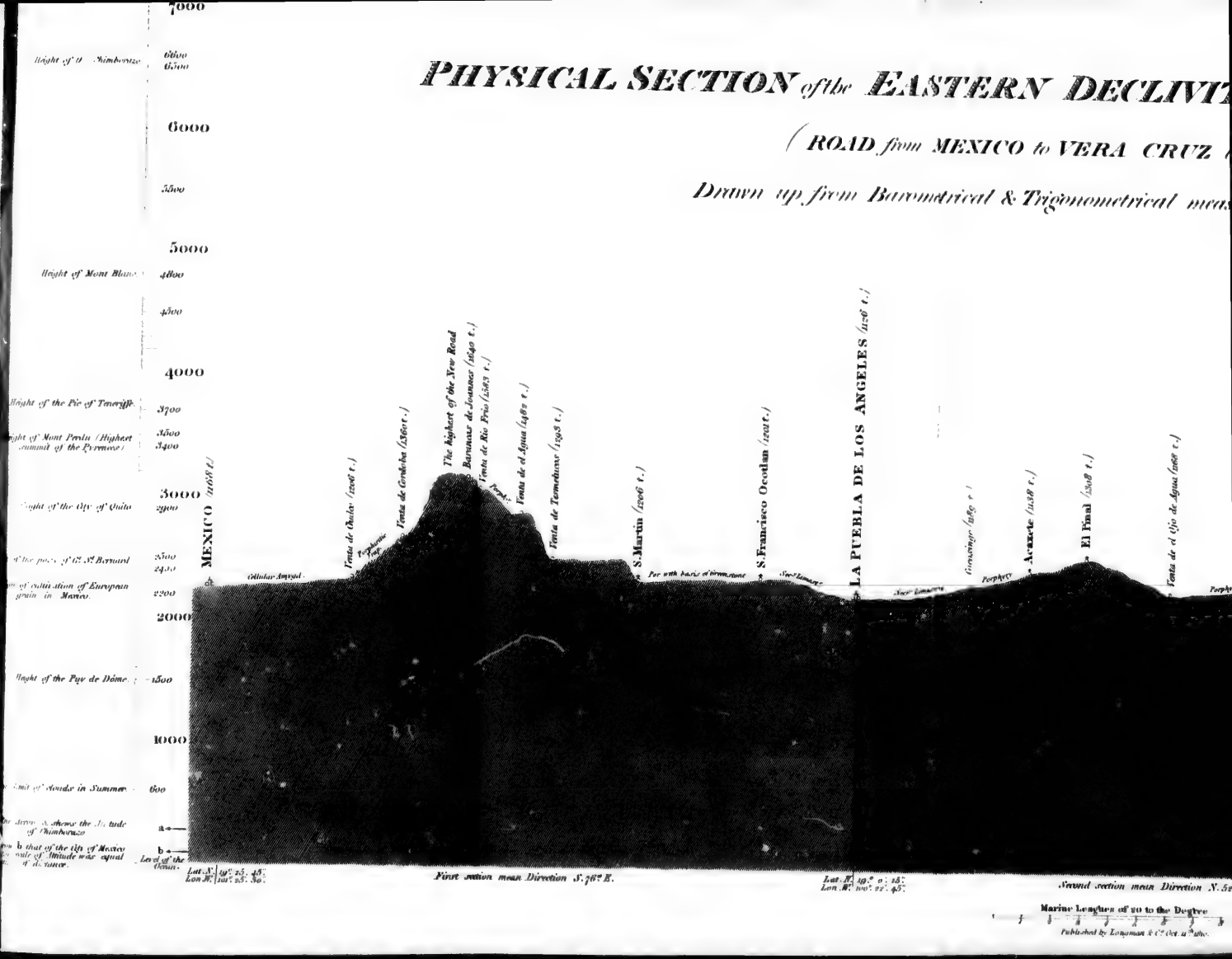


Engraved by Wilson Lowry.

PHYSICAL SECTION of the EASTERN DECLIVI

(ROAD from MEXICO to VERA CRUZ

Drawn up from Barometrical & Trigonometrical meas

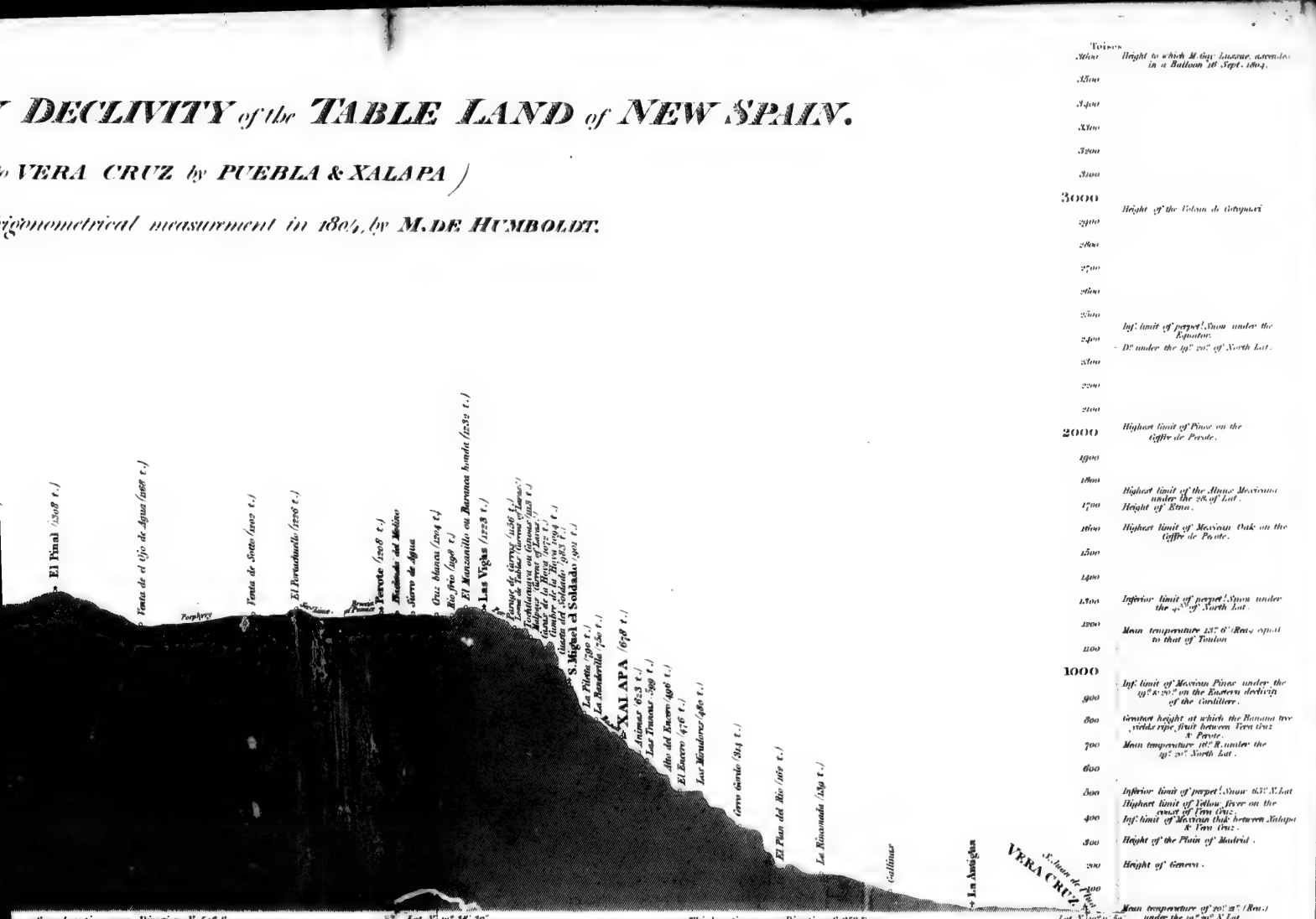

7000
6000
5000
4000
3000
2000
1000
Height of the Pic of Teneriffe 3700
Height of Mont Perdu (Highest summit of the Pyrenees) 3500
3400
Height of the City of Quito 2900
Limit of cultivation of European grain in Mexico. 2200
Height of the Puy de Dôme 1500
Limit of clouds in Summer 600
MEXICO (7697 f.)
Cathedral Amyad.
Venta de Ovejas (7206 f.)
Venta de Cordoba (8360 f.)
The highest of the New Road
Barranca de Joanico (8840 f.)
Venta de Rio Frio (8383 f.)
Venta de el Aguila (8081 f.)
Venta de Temeluca (7923 f.)
S.Martin (7206 f.)
Por with basis of Hornblende
S.Francisco Ocolan (7221 f.)
LA PUEBLA DE LOS ANGELES (7176 f.)
Porphyry
Arrieta (7838 f.)
El Final (7308 f.)
Venta de el Ojo de Agua (7087 f.)
Lat. N. 19° 25′ 45″
Lon. W. 102° 25′ 30″
First section mean Direction S. 76° E.
Lat. N. 19° 0′ 15″
Lon. W. 100° 22′ 45″
Second section mean Direction N. 52
Marine Leagues of 20 to the Degree

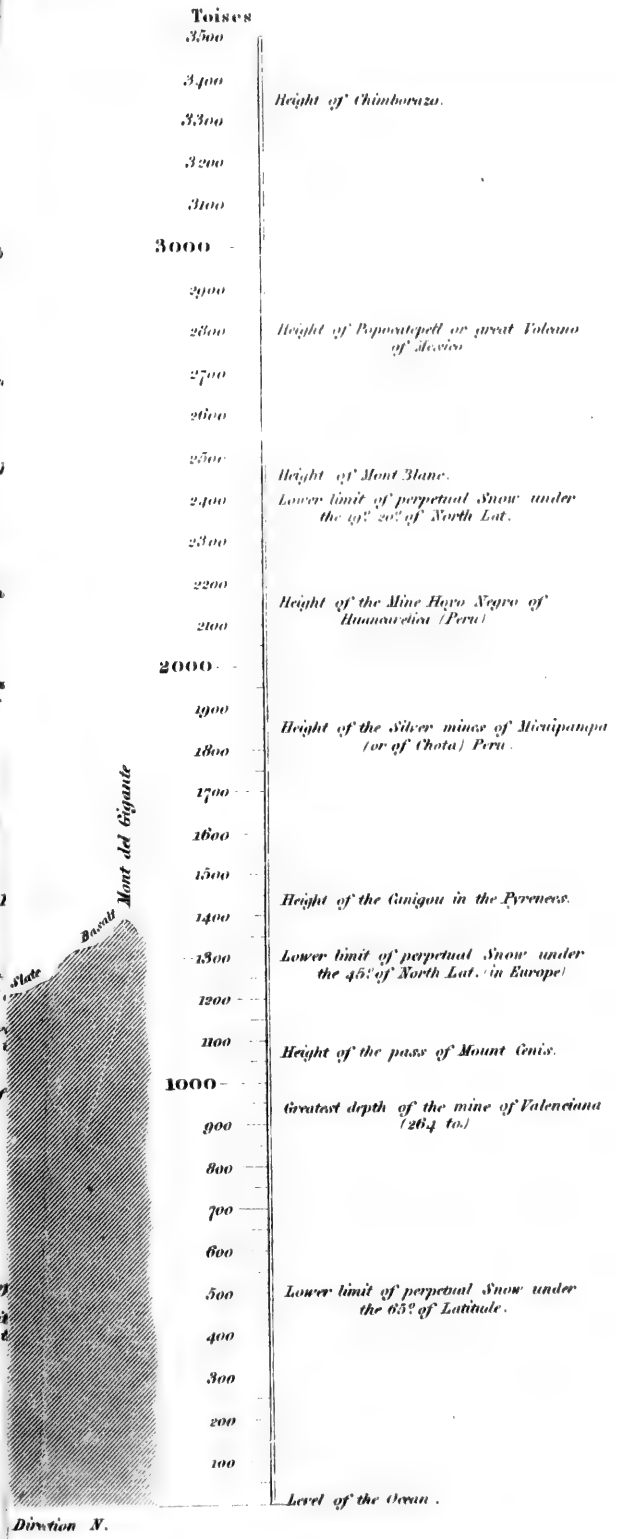
Published by Longman & Co. Oct. 1. 1810.

DECLIVITY of the TABLE LAND of NEW SPAIN.

VERA CRUZ by PUEBLA & XALAPA)

Trigonometrical measurment in 1804, by **M. DE HUMBOLDT.**


Toises
Height to which M. Gay Lussac ascended in a Balloon 16 Sept. 1804.
3500
3400
3300
3200
3100
3000
Height of the Volcan de Orizaba
2900
2800
2700
2600
2500
Inf.t limit of perpet.l Snow under the Equator.
2400
D.o under the 19.o 20' of North Lat.
2300
2200
2100
2000
Highest limit of Pines on the Cofre de Perote.
1900
1800
Highest limit of the Mimosa Mexicana under the 28.o of Lat.
1700
Height of Etna.
1600
Highest limit of Mexican Oak on the Cofre de Perote.
1500
1400
1300
Inferior limit of perpet.l Snow under the 4.o of North Lat.
1200
Mean temperature 17.o 6 (Reau.) equal to that of Toulon
1100
1000
Inf.t limit of Mexican Pines under the 19.o 8' 30" on the Eastern declivity of the Cordillera.
900
Greatest height at which the Banana tree yields ripe fruit between Vera Cruz & Perote.
800
Mean temperature 16.o R. under the 19.o 20' North Lat.
700
600
500
Inferior limit of perpet.l Snow 65.o N. Lat
Highest limit of Yellow fever on the coast of Vera Cruz
400
Inf.t limit of Mexican thick forest between Xalapa & Vera Cruz.
300
Height of the Plain of Madrid.
200
Height of Geneva.
100
Mean temperature of 20.o 27' (Reau.) under the 19.o 20' N. Lat.
El Final (3068 t.)
Venta de el Ojo de Agua (2987 t.)
Venta de Soto (2915 t.)
El Portachuelo (2766 t.)
Perote (2908 t.)
Rodadero del Molino
Sierro de Agua
Cruz blanca (2894 t.)
Rio frio (2896 t.)
El Manzanillo ou Barranca honda (2832 t.)
Las Vigas (2228 t.)
Porphyry
Trap
Basalt
Transition Porphyry
Peroxide of Iron
Barranca honda (2832 t.)
Cerro de Tablas (Carrot of Lanas.)
Cerro de Tablas (Carrot of Lanas.) (2815 t.)
Malpaso (Carrot of Lanas.) (2815 t.)
Cruz de la Heria (2672 t.)
Llanada de la Heria (2594 t.)
Llanada de la Heria (2594 t.)
S. Miguel el Soldado (2011 t.)
La Plata (1901 t.)
La Rinconada (1561 t.)
XALAPA (1658 t.)
Animas (1623 t.)
Las Trancas (1598 t.)
Alto del Enemigo (1496 t.)
El Encero (1476 t.)
Las Minderes (1460 t.)
Cerro Gordo (814 t.)
El Plan del Rio (1161 t.)
La Rinconada (834 t.)
Collinas
La Antigua
VERA CRUZ
S. Juan de Ulua
Second section mean Direction N. 5.o E. S.
Lat. N. 19.o 36' 30"
Lon. W. 99.o 36' 0"
Third section mean Direction S. 65.o E.
Lat. N. 19.o 11' 54"
Lon. W. 98.o 29' 0"
Marine Leagues of 20 to the Degree
0 1 2 3 4 5 10
Published by Longman & Co.o Oct. 1.st 1810.
Engraved by Wilson Lowry.

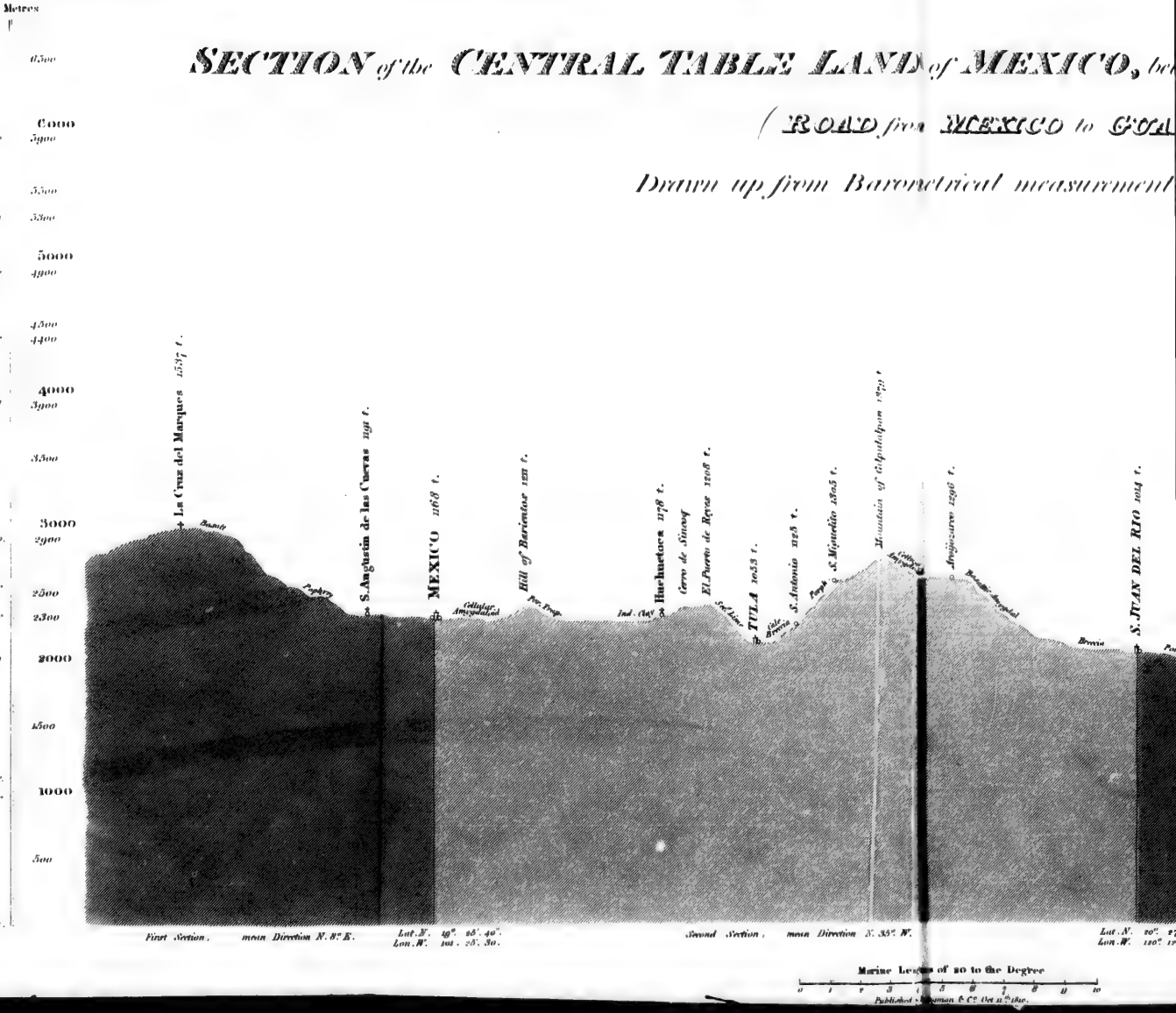


Engraved by Wilson Lowry.

SECTION of the CENTRAL TABLE LAND of MEXICO, be

ROAD from MEXICO to GOA

Drawn up from Barometrical measurement

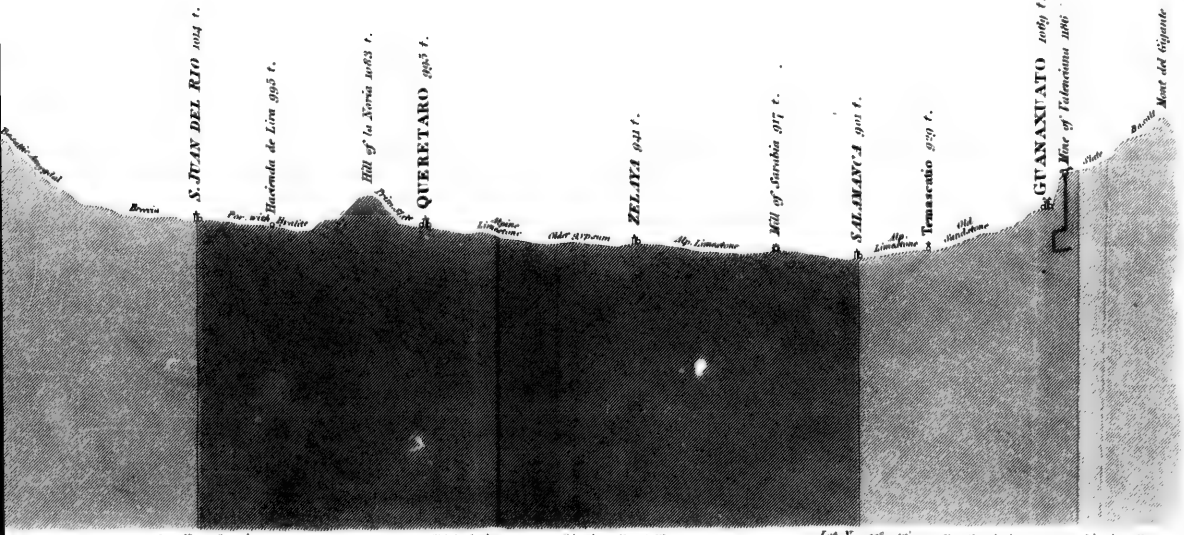

Metres
6500
6000
Cotopaxi in the Kingdom of Quito 5900
5500
Height of the Pic of Orizaba 5300
5000
Mount of Rocu Pichincha near Quito 4900
4500
Lower limit of perpetual Snow under the 19° 30'. of N. Lat. 4400
4000
Mt of the Grosse Glockner in the Tyrol 3900
3500
3000
Height of the City of Quito. 2900
Lower limit of perpetual Snow under the 45° of N. Lat. in Europe 2500
Port de Gavernie one of the passes of the Pyrenees. 2300
2000
Height of the passage of Simplon of the Alps.
1500
Summit of the Brocken in Germany.
1000
Lower limit of perpetual Snow under the 65° of N. Lat.
500
Level of the Ocean.
La Cruz del Marques 1537 t.
Basalt
Porphyry
S. Angelin de las Cuevas 1191 t.
MEXICO 1168 t.
Cellular Amygdaloid
Hill of Barientos 1211 t.
Por. Trap.
Ind. Clay
Huehuetoca 1178 t.
Cerro de Sincoy
El Puerto de Reyes 1208 t.
Sec. Lime
TULA 1053 t.
Calc. Breccia
S. Antonio 1128 t.
Porph.
S. Miguelito 1305 t.
Mountain of Guadalupe 1870 t.
Calcareous Amygdaloid
Arenaceous 1296 t.
Basaltic Amygdaloid
Breccia
S. JUAN DEL RIO 1014 t.
First Section, main Direction N. 8° E.
Lat. N. 19°. 25'. 40".
Lon. W. 103. 25'. 30.
Second Section, main Direction N. 35° W.
Lat. N. 20°.
Lon. W. 100°.
Marine Leagues of 20 to the Degree
0 1 2 3 4 5 6 7 8 9 10

Published [illegible] Oct 1st 1810.

MEXICO, between the 19 and 21.° of NORTH LATITUDE.

LEXICO to GUANAXUATO)

ual measurment by M. DE HUMBOLDT.



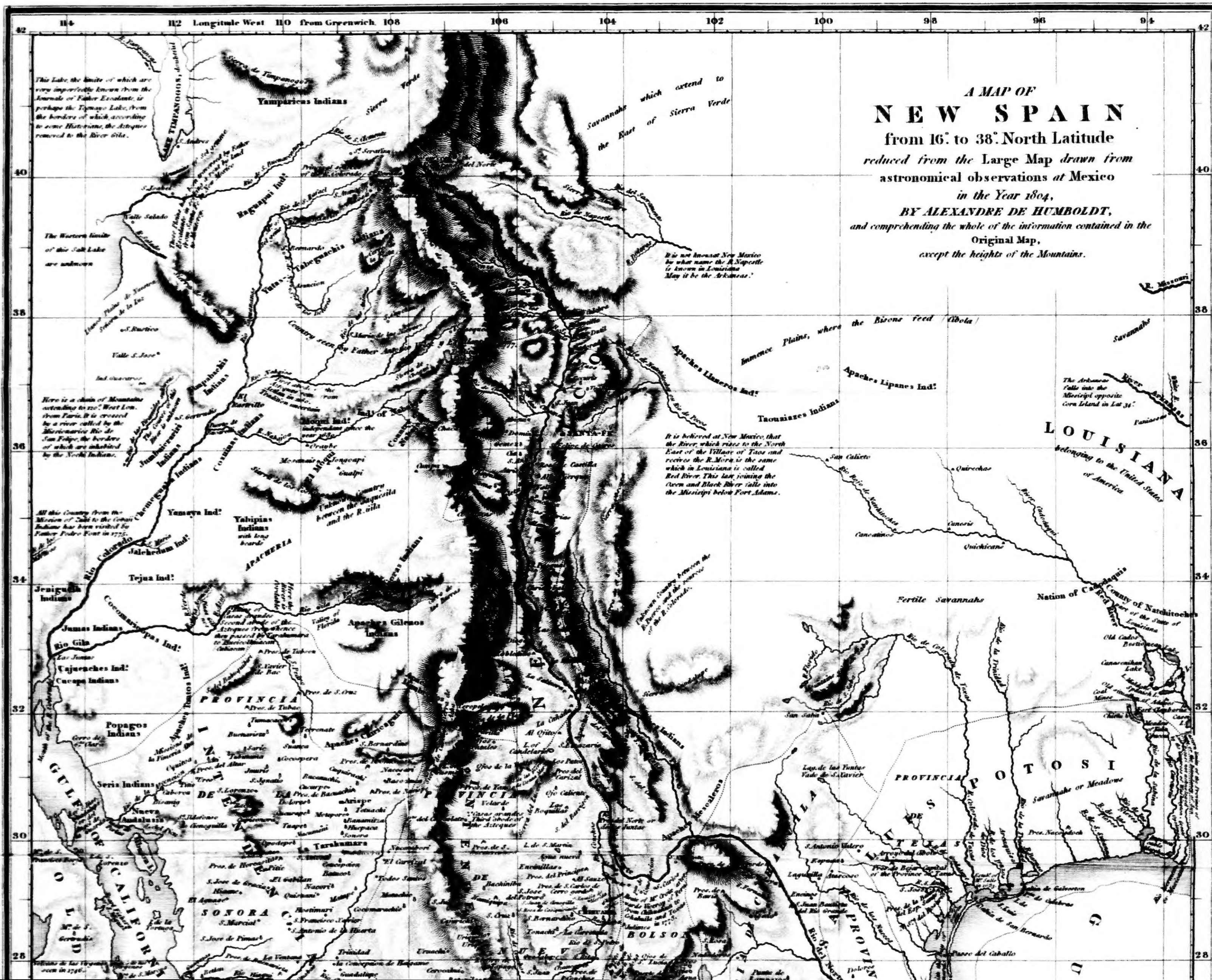
Toises

3500
3400 — Height of Chimborazo
3300
3200
3100
3000
2900
2800 — Height of Popocatepetl or great Volcano of Mexico
2700
2600
2500 — Height of Mont Blanc
2400 — Lower limit of perpetual Snow under the 45° 50' of North Lat
2300
2200
2100 — Height of the Mine Hoya Negra of Huancavelica Peru
2000
1900
1800 — Height of the Silver mines of Hoxipampa or of Chota Peru
1700
1600
1500
1400 — Height of the Canigou in the Pyrenees
1300 — Lower limit of perpetual Snow under the 45° of North Lat. in Europe
1200
1100 — Height of the pass of Mount Cenis
1000
900 — Greatest depth of the mine of Valenciana 1264 t.
800
700
600
500 — Lower limit of perpetual Snow under the 65° of Latitude.
400
300
200
100
Level of the Ocean.

to the Degree

Engraved by Wilson Lowry.

GREAT EQUINOCTIAL OCEAN
(MAR DEL SUR Ó OCEANO PACIFICO)
GULF OF MEXICO
SEA OF Vermilion Sea CORTES
GREAT NORTHERN OCEAN
CALIFORNIA
SONORA
NUEVA VIZCAYA
NUEVO REYNO DE LEON
PROVINCIAS INTERNAS DE ORIENTE
PROVINCIAS INTERNAS DE OCCIDENTE
BOLSON DE MAPIMI
Rio Bravo del Norte
GULF OF TEHUANTEPEC
ISLES OF REVILLAGIGEDO
EXPLANATION.
CAPITAL or large TOWN.
Less considerable Town. Borough.
Village.
Seat of the provincial Council of the Mines.
Real Mine.
Hacienda Farm.
Rancho Station of Muleteers.
Presidio Military Post.
Astronomical Observation calculated by M. Oltmanns.
114 Longitude West 112 from Paris. 110
108
106
104
102
100
98
96
30
28
26
24
22
20
18
16


A MAP OF
NEW SPAIN
from 16°. to 38°. North Latitude
reduced from the Large Map drawn from
astronomical observations at Mexico
in the Year 1804,
BY ALEXANDRE DE HUMBOLDT,
and comprehending the whole of the information contained in the
Original Map,
except the heights of the Mountains.
Longitude West 110 from Greenwich
This Lake, the limits of which are very imperfectly known from the Journals of Father Escalante, is perhaps the Teguayo Lake, from the borders of which according to some Historians, the Azteques removed to the River Gila.
The Western limits of this Salt Lake are unknown
Here is a chain of Mountains extending to 116° West Lon. from Paris. It is crossed by a river called by the Missionaries Rio de San Felipe, the borders of which are inhabited by the Nochi Indians.
All this Country from the Mission of Caborca to the Gila Indians has been visited by Father Pedro Font in 1775.
It is not known at New Mexico by what name the R. Napestle is known in Louisiana. May it be the Arkansas?
It is believed at New Mexico, that the River, which rises to the North East of the Village of Taos and receives the R. Mora is the same which in Louisiana is called Red River. This last joining the Ocen and Black River falls into the Missisipi below Fort Adams.
The Arkansas falls into the Missisipi opposite Corn Island in Lat. 34°.
Savannahs which extend to the East of Sierra Verde
Immence Plains, where the Bisons feed (Cibola)
Yamparicas Indians
Apaches Llaneros Ind.
Apaches Lipanes Ind.
Taouaiazes Indians
LOUISIANA belonging to the United States of America
Fertile Savannahs
Nation of Caddoquis
County of Natchitoches
Jalchedum Ind.
Tejua Ind.
Yabipias Indians with long beards
APACHERIA
Apaches Gileños Indians
Rio Colorado
Rio Gila
Cocomaricopas Ind.
Cajuenches Ind.
Cucapa Indians
Popagos Indians
Seris Indians
PROVINCIA DE SONORA
Apaches Tontos Ind.
GULF OF CALIFORNIA
PROVINCIA DE POTOSI
PROVINCIA DE TEXAS
Savannahs or Meadows
BOLSON
Tarahumara
San Saba
Paso del Caballo